



Synapse

HCC05

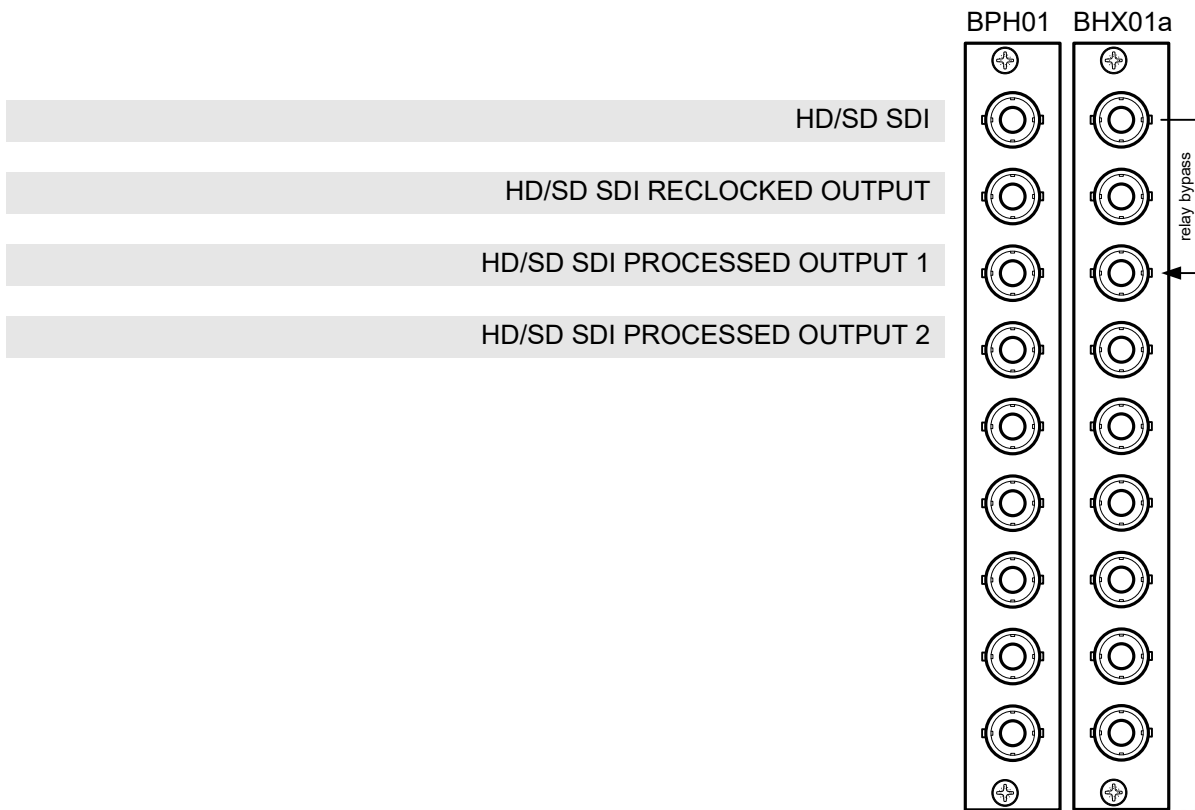
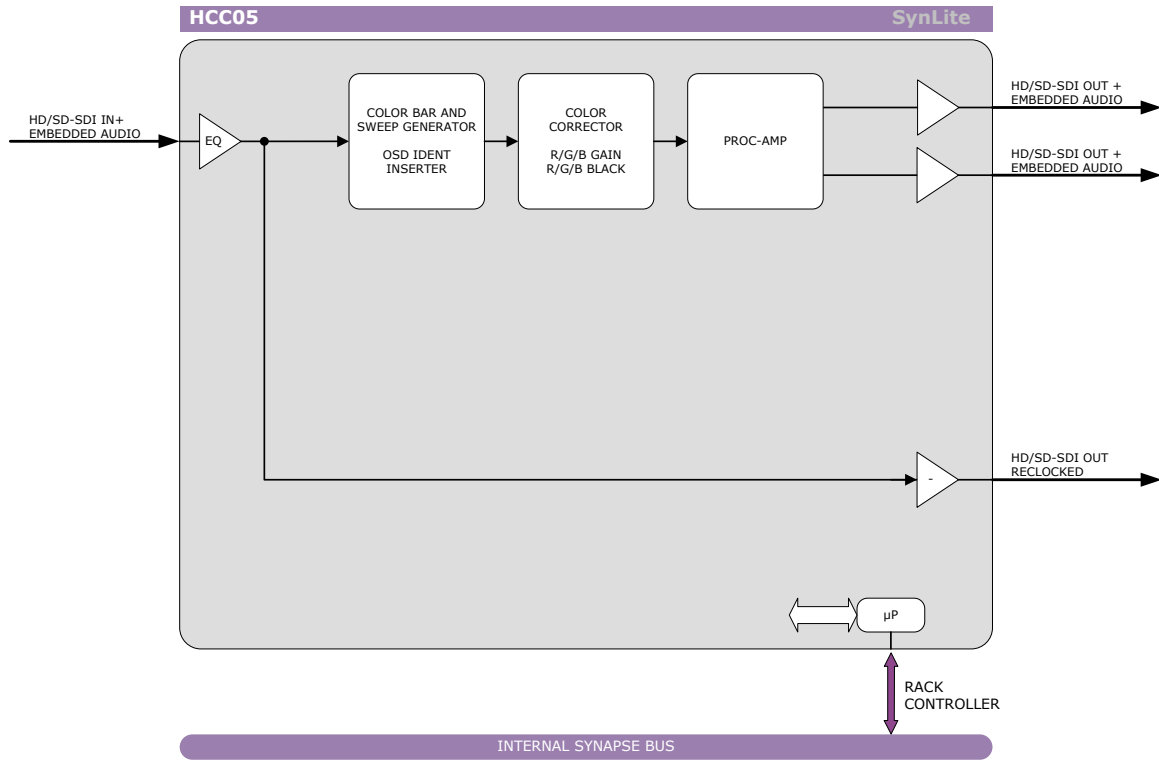
HD/SD SDI YC and RGB color corrector

A Synapse® product



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Block schematic & I/O panel



Features

The HCC05 is an HD SDI color corrector with black level adjustment and built in color bar and sweep generator. The card has 2 processed outputs and 1 reclocked output and allows you to adjust individual or combined RGB gain and black levels and YCbCr gain and black levels. The card includes a ProcAmp and an OSD ident inserter.

- HD-SDI and SD-SDI compatible
- Formats:
 - 1080i/50/60
 - 1035i/60
 - 720p/50/60/
 - 1080p(sf)/24/25/30
- Two processed outputs
- One reclocked output
- Built-in ProcAmp
 - Y, Cb and Cr Gain control
 - Y, Cb and Cr black control
- Color correcting:
 - R, G and B gain control
 - R, G and B black level control
 - RGB total gain
 - Black total gain
 - Chroma gain
- Test pattern (color bar/sweep)
- OSD ident label with maximum 10 characters (for set-up purposes)
- Full control and status monitoring through the front panel of the SFR08/SFR18 frame and the Ethernet port (ACP)

Applications

- Generic ProcAmp color corrector
- In-video screen color correction for studio screens
- Low cost camera source color correction

Ordering information

Module:

- **HCC05:** HD/SD SDI YC and RGB color corrector

Standard I/O:

- **BPH01_HCC05:** I/O panel for HCC05

Relay bypass I/O:

- **BHX01a_HCC05:** I/O panel for HCC05 with relay bypass

Specifications

HD/SD Serial Video Input

Standard	625/50 or 525/59.94 SMPTE 259M-C (270Mb/s) with SMPTE 272M embedded audio SMPTE 292M (1.5Gb/s), SMPTE 260M, SMPTE 274M, SMPTE 296M, SMPTE 349M 1080i/59.94, 1080i/50, 720p/59.94, 720p/50
Equalization	Automatic to 100m @ 1.5Gb/s with Belden 1694A or equivalent cable.
Return Loss	> 15dB up to 1.5GHz

HD Serial Video Output

Standard	625/50 or 525/59.94 SMPTE 259M-C (270Mb/s) with SMPTE 272M embedded audio SMPTE 292M (1.5Gb/s), SMPTE 260M, SMPTE 274M, SMPTE 296M, SMPTE 349M 1080i/59.94, 1080i/50, 720p/59.94, 720p/50
Signal Level	800mV nominal
DC Offset	0V \pm 0.5V
Rise and Fall Time	200ps nominal for HD, 750ps nominal for SD
Overshoot	< 10% of amplitude
Return Loss	> 15dB up to 1.0Gb/s, > 10dB up to 1.5Gb/s
Wideband Jitter	< 0.2UI

Miscellaneous

Weight	Approx. 250g
Operating Temperature	0 °C to +50 °C
Dimensions	137 x 296 x 20 mm (HxWxD)

Electrical

Voltage	+24V to +30V
Power	<8 Watts